INNOVATIVE FORESTRY PRACTICES AGREEMENTS

Handbook

MINISTRY OF FORESTS

with input from

FOREST RENEWAL BC &
MINISTRY OF ENVIRONMENT, LANDS AND PARKS

April, 2000

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Introduction

This document provides information regarding Innovative Forest Practices Agreements (IFPAs) and the processes involved in administering this initiative. The handbook is intended to encourage innovation, not stifle it. Where the handbook conflicts with legislation and regulations, the legislation and regulations will prevail.

Enabling Legislation and Eligibility

Through IFPAs the Ministry of Forests will conduct several pilots to test new and innovative forestry practices. Designated licensees will be given an opportunity to increase their allocated harvest levels and maintain and enhance employment.

Legislation

The IFPA initiative is governed by Section 59.1 of the *Forest Act* (see Appendix I), introduced in 1996, which contains the provisions under which the Minister of Forests will enter into an IFPA, the length of the agreement, the contents of the forestry plan, and other key requirements.

Regulation

The IFP regulation (see Appendix II) provides the means for the legislation to be carried out by specifying the types of licences eligible for an IFPA, and the types of innovative forest practices and other activities eligible under an IPFA.

IFPA Initiative

IFPAs are one of the initiatives identified in the Jobs and Timber Accord. The Accord stated:

> "The Government will enter into innovative forest practices agreements and other enhanced forestry practices agreements to test new and innovative forestry practices. The Government will, as a matter of policy, and subject to the evaluation of pilot projects now under way, make available such agreements and expand such programs on a broad and fair basis. Participating licensees will have the opportunity to increase their allocated harvest levels and to enhance and maintain employment in the forest industry."

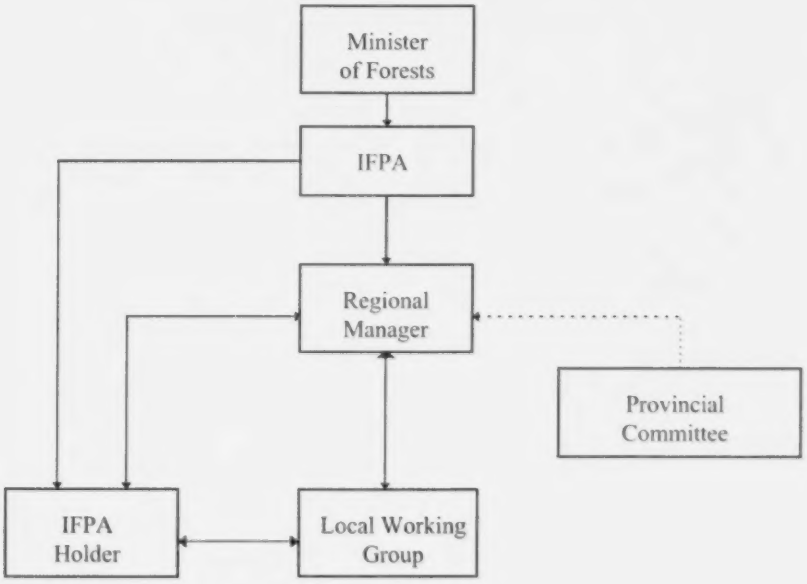
Objectives of the IFPA

The objectives of the IFPA are:

1. to test new and innovative forestry practices intended to improve forest productivity. Such practices are subject to the Forest Practices Code.
2. to encourage designated licensees to carry out the forest practices by offering them the opportunity to apply for an increase to their allocated harvest levels to enhance and maintain employment in the forest industry.

IFPA Infrastructure (generic)

The diagram below shows some of the key entities associated with IFPAs and their primary linkages. The solid lines represent contractual or operational lines of communication. The dashed line represents advisory communication. The membership of the local working groups varies from pilot to pilot; in addition to the IFPA holders and Ministry of Forests staff, it may include Ministry of Environment, Lands and Parks staff, Forest Renewal BC staff and others with a role in the IFPA pilots.



Current Activities/Pilots

Initially, six IFPA pilots were selected. As of April 2000 Five pilots have been approved and had agreements issued:

- Interfor in the Kamloops and the Fraser TSAs;
- Lignum in the Williams Lake and 100 Mile House TSAs; and
- all major licensees with replaceable licences in the Merritt TSA.
- all major licensees with replaceable licences in the Arrow TSA.
- all major licensees with replaceable licences in the Lakes and Morice TSAs

The Prince George IFPA with all major licensees in the Vanderhoof Forest Distict has been approved but the agreement has not been issued.

IFPA Proposal Process

The process used to establish IFPA pilots begins with an invitation for proposals that lays out:

- the conditions under which the process will proceed;
- the process and deadlines, and;
- evaluation criteria.

The proposals are evaluated using the evaluation criteria and corresponding scoring. The regional manager considers the results of the evaluation and other factors and makes a recommendation to the Minister of Forests. The minister makes a decision based on the regional manager's recommendation and other considerations.

Appendix III outlines the procedures used in the Nelson Forest Region request for proposals. Similar procedures are being used for selection of the remaining pilots (Prince George, Prince Rupert and Vancouver regions).

IFP Agreements

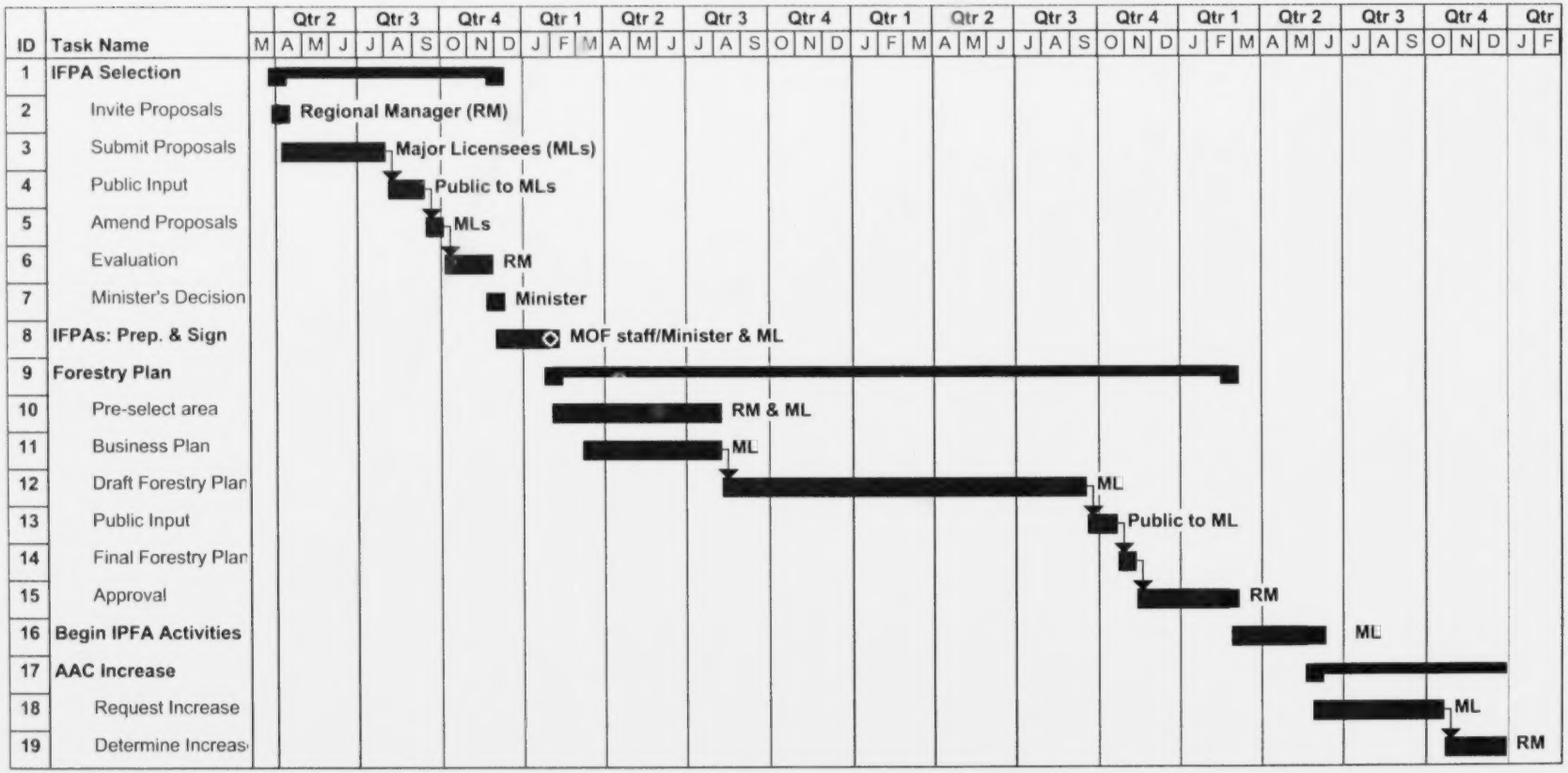
Where a selected IFPA proposal is a joint proposal involving more than one major licensee in a TSA, the preferred approach is to issue a separate agreement to each licensee rather than a single joint agreement to all the licensees. Regardless of the number of agreements, they are treated as a single IFPA pilot. The success and continuing viability of the pilot will be dependent on the cooperative participation of all licensees.

A separate agreement issued to each licensee relies on the licensees who submitted the joint proposal to maintain a cooperative working relationship. The licensees in the Merritt pilot, for example, hold separate agreements, but have formed a registered cooperative to sustain the unified approach established by their proposal. Although the cancellation of one agreement would not directly affect the agreements, it could still potentially jeopardize the continuation of the IFPA pilot.

A joint agreement issued to all licensees is consistent with the unified approach of a joint proposal, but means that the health of the agreement is dependent on the performance of

all licensees. This encourages all licensees to fulfill their commitments, but if one licensee is unable to continue it could potentially jeopardize the agreement.

IFP Proposal Process: from Proposal to AAC Increase



NOTE: These are approximate times and do not represent maximums or minimums.

Forestry Plan Preparation

The forestry plan is a pivotal document within the IFPA process. The plan defines the forest management strategy the IFPA holder will follow to improve the productivity of the forest resource. The plan will also describe what, where, how and when innovative forestry practices or other activities will be undertaken, culminating in a request for an increase to the IFPA holder's allocated harvest level. Appendix IV presents the process (roles and responsibilities) leading to approval of the forestry plan.

To assist in the development of the forestry plan, funding is available from Forest Renewal BC through either existing annual or multi-year agreements as appropriate. For further information on funding see Appendix VII.

Business Plan

The Regional Director of Forest Renewal BC or the Ministry of Forests Regional Manager may require that the IFPA holder prepare a Business Plan, outlining the activities and associated costs which will be conducted in developing the forestry plan. The purpose of the Business Plan is to enable the regional director with the guidance of the regional manager to assess whether the activities and costs of developing the forestry plan are consistent with the IFPA and funding priorities. The implementation of the Business plan and the development of the forestry plan are one and the same. If the regional director or regional manager requires a business plan, it must be consistent with Section 59.1(6)(e) of the Forest Act, the IFP regulation, and any additional requirements (e.g. forestry plan outline, Appendix V) specified by the regional director or regional manager.

It is recommended that development of a forestry plan include a strategic analysis comparing different innovative forestry practices scenarios to establish one or more forest management regimes. Other activities which should be considered in developing the forestry plan include:

- a timber supply base case
- applicable sensitivity analyses to identify important sensitivities and highlight opportunities for investment
- identification of resource inventory gaps
- assessment of operability lines
- assembling available growth and yield PSP and site productivity data
- reviewing applicable enhanced or innovative forest management initiatives currently underway for which there are documented or demonstrated benefits
- demonstration of review and input, as specified in the IFPA, from local stakeholders and the public

Please note that, unless specifically required by the regional manager, the collection of new resource inventory or growth and yield data is not seen as a necessary step in the preparation of a forestry plan.

Forestry plans must be submitted to the local Ministry of Forests (MoF) regional manager for review and approval. Before submitting the completed forestry plan to the regional manager, the IFPA holder will, according to the terms and conditions of the IFPA, make the forestry plan available for input from the public, MELP, MoF and other stakeholders. Where provided by the IFPA, the IFPA holder will make the forestry plan available for a period in a manner specified by the regional manager. Timeline for submission will be as specified in the IFPA.

Forestry Plan Implementation

In order for the actual or projected results of a forest practice, activity or treatment to be considered by the regional manager when determining an AAC increase, it must qualify under the IFP Regulation as an innovative forestry practice or other activity. Any forest practice, activity or treatment that does qualify under one of the categories under the regulation would not be considered eligible as an innovative forestry practice.

Below are listed various practices and activities, both eligible and ineligible. The list is not definitive; it provides an indication of the opportunities that exist under IFPAs. The regional manager will determine the eligibility of individual practices and activities using the IFP regulation..

Some activities that are eligible under the IFP regulation may not, however, be eligible for funding from Forest Renewal BC (FRBC). For information on FRBC funding eligibility see Appendix VII.

One of the key objectives of IFPAs is to encourage innovation. Innovation for its own sake cannot be prescribed, however, innovation under IFPAs is defined through legislation, regulation, licence agreements and standard practice.

An IFPA holder has the opportunity to gain an increase in allowable annual cut where the practices under an IFPA justify an increase. The "eligibility" of a practice with respect to justifying an allowable annual cut increase will be based on whether it could be expected to improve forest productivity or timber availability. For each IFPA, the regional manager will determine the eligibility of each activity based on section 59.1 of the *Forest Act*, the IFP Regulation, the terms of the forest licence (or timber sale licence) and baseline practices.

Ineligible Activities

- any silviculture treatment or practice currently considered part of basic silviculture obligations to produce a free growing stand in the Province, Region, District, TSA, or operating area is not considered eligible.
- any activity that is a requirement of a licence or permit issued to the IFPA holder in the same TSA as the IFPA, or operational plans under such a licence or permit, is not considered eligible.
- utilization of smaller diameter timber below required utilization standards is not considered eligible.

Eligible Activities

Examples of silviculture and harvesting practices that may be considered eligible:

Early planting: Exceeds current standards of regeneration practice for similar ecosystems - i.e. reductions in regeneration delay, resulting in earlier availability of desired merchantable volumes and piece size distribution.

Fertilization at time of planting: Increases growth and reduces time to breast-height age and green-up.

Cluster planting: Increases in volume/hectare. (TASS)

Use of extra large stock: Reduces time to breast-height age and green-up.

Forest Health management: e.g., management of White pine blister rust.

Early stocking control: Improves diameter growth on remaining trees with potential earlier harvest.

Alternative harvesting methods and silviculture systems: (except where such activities are part of an operational trial or other experimental application).

Other Silviculture and Harvesting Practices

- any backlog reforestation or site rehabilitation treatments; Does this mean if we complete the IO/MO treatments we get the benefit? It could be a mechanism to encourage early completion of the IO/MO. I recommend it be eligible for increased AAC consideration and be specified in an example.
- activities which bring land back into production such as rehabilitation of roads and landings on backlog areas;
- incremental silviculture treatments such as spacing, pruning or fertilization;
- silviculture or forest health activities which reduce or manage forest health problems on pre -1987 or free growing stands;
- establishment of demonstration areas, operational trials, or other experimental applications of partial cutting or silviculture management carried out under the terms of an approved study plan, which includes a monitoring component, demonstrating or employing the results of existing research, objectives or application of local research information.

- collection of incremental survey information which is used to improve stand growth and development information (for example, regeneration performance assessments, silviculture surveys to determine time to breast height and green-up, silviculture surveys to determine operational adjustment factors for growth and yield projection for managed stands);
- activities which are aimed at riparian area improvement or restoration, wildlife and fisheries habitat improvement;

Inventory and Growth and Yield Projects

The eligibility of Inventory and Growth and Yield Projects will be assessed on consideration of the material contained in the Forestry Plan submitted by the applicant.

Innovation may be demonstrated through:

- application of new technologies;
- application of innovative approaches with existing technologies to provide improved information;
- application of new technologies on existing data sets;
- application of existing technologies with new data; or
- other.

The following are some examples of inventory and growth and yield projects that are potentially eligible:

- projects that exceed existing standards (Forest Productivity Council, Code, MoF inventory standards, etc.):
- projects that update basic inventory and growth and yield data -- the more out of date the existing data, the higher the priority for funding;
- projects that fit the Forest Productivity Council or ministry plans for updating inventory data and growth and yield information;
- projects that provide baseline information to enable resource data gathering and growth and yield activities;
- projects that address environmental resource inventory gaps and reduce uncertainty around risk to these resources.

All project proposals must be submitted as part of the forestry plan to the regional manager of the MoF for review. If applying for FRBC funding, the regional director of FRBC should be contacted to determine if FRBC requires a copy of the forestry plan. Proposals may be subject to independent peer review as well as being assessed for cost effectiveness. All projects addressing non-timber values and environmental knowledge gaps will be referred to the regional director of MELP.

AAC Increase

Section 59.1(7) states that, after approving the IFPA holder's forestry plan, the regional manager may increase the AAC of the IFPA holder's licence by an amount justified according to the timber supply analyses methodology approved by the chief forester or designate. The second part of Appendix IV presents the basic process (roles and responsibilities) for requesting and approving an AAC increase.

General timber supply analysis considerations, subject to any refinements made by the regional manager, are contained in Appendix V (Appendix 3 of Forestry Plan Outline).

Baseline for Eligibility of Forest Practices

Section 59.1 of the *Forest Act* was drafted in a manner to include only those practices which were performed subsequent to, and in accordance with, an approved forestry plan. The legislation and regulations may, however, be interpreted as allowing the regional manager, subject to the ***'baseline'*** established by the regional manager, to accept information such as new inventory data collected before the forestry plan is approved.

The baseline is simply the date used to determine the eligibility for AAC increases of forest practices under an IFPA. Forest practices carried out after this date could potentially contribute to an AAC increase, whereas practices carried out before this date are ineligible. Section 59.1(5) establishes the date the forestry plan is approved as a rudimentary baseline, which the regional manager can revise, subject to the IFP Regulation and the content of the forestry plan.

Section 2(e) of the IFP Regulation identifies the collection and analysis of new inventory data or growth and yield data as potentially eligible under an IFPA. This is understood to mean that analysis of the data is potentially eligible as long as it is carried out after the date the forestry plan is approved, regardless of whether collection of the data is carried out before or after the date the forestry plan is approved.

All other categories of forest practices identified in the IFP Regulation are potentially eligible as long as they are carried out after the forestry plan is approved. The regional manager may establish a separate baseline for an individual practice or group of practices eligible under the IFP Regulation.

The date the forestry plan is approved represents a logical date for the baseline, but the regional manager may establish a baseline that is subsequent to the approval date of the forestry plan. Also, the information, requirements and standards linked to the baseline may extend back to the last TSR where information or a particular requirement or standard contained in the last TSR is still current.

The baseline is only one of several criteria available to the regional manager for determining the eligibility of a specific practice. Among the other criteria that may also affect eligibility are whether the practice is included in the forestry plan, whether it has been carried out in compliance with the forestry plan and whether it qualifies under the IFP Regulation.

There are three distinct stages at which the regional manager may determine an AAC increase:

- after the forestry plan has been approved but before the activities are performed;
- after the forestry plan has been approved and the activities performed but before the forest resource has responded to the activities; or
- after the forestry plan has been approved, the activities have been performed and there is a response to or results from the activities performed.

At which of these stages to determine the AAC increase is the regional manager's decision, but will depend to some degree on the particular activity, the information available, the certainty of response, and the certainty of the activity continuing. The collection and analysis of inventory data, for example, would have to be completed before the regional manager would be in a position to increase the AAC.

The IFPA holder may, if required by the regional manager, have to demonstrate that the increased harvest level is spatially feasible; facilitates, or at least does not hinder, achievement of objectives specified in the forestry plan; and does not have negative impacts on other licensees (refer to principles above).

Conditions under which an AAC Increase may be Considered

Before submitting an application for an AAC increase , the IFPA holder should provide the following, unless otherwise specified by the regional manager:

- full documentation of the implementation and outcomes, if applicable, of any activities carried out following approval of the forestry plan;
- documented evidence that the activities were carried out in accordance with the IFPA, the approved forestry plan and the Forest Practices Code;
- complete results of the timber supply analysis and associated work according to the methodology approved by the chief forester or designate;

Regional Manager's Determination versus Chief Forester's Determination

The regional manager's determination of a licence AAC increase is separate from the chief forester's AAC determination for the TSA and does not replace or supersede it. The regional manager's determination applies to the innovative forestry practices and other eligible activities on the IFPA area only. The regional manager's determination of an AAC increase for the licence may, however, coincide with the timing of the chief forester's AAC determination for the TSA. The chief forester may consider the IFPA holder's activities or timber supply analyses in his AAC determination.

Regional Manager's Responsibility

In determining an AAC increase, the regional manager is responsible for

- considering IFPA holder's activities;
- reviewing IFPA holder's timber supply analyses (or conducting the analyses);
- granting the AAC increase, if any;
- imposing any limitation or conditions associated with the AAC increase;
- where required under the IFPA, providing the IFPA holder with a rationale for the results of the determination (the rationale may be requested under FOI).

Timing of Regional Manager's Decision

The regional manager may take several months to make a determination and may time the determination to coincide with the chief forester's AAC determination for the TSA. On receipt of an IFPA holder's request for an AAC increase, the regional manager will notify the IFPA holder of the projected date of the regional manager's determination.

Withdrawal of AAC Increases

If, subsequent to an AAC increase, the increase is found not to be justified, the regional manager may reduce the AAC of the licence, by an amount not exceeding the increase.

Events of default

Where the IFPA holder does not comply with:

- the IFPA;
- the approved forestry plan;
- any limitation or condition the regional manager imposes on the AAC increase;
- the *Forest Act* and regulations; or
- the *Forest Practices Code of British Columbia Act* and regulations,

the Regional Manager may do one or both of the following

- suspend or cancel the IFPA according to the suspension and cancellation provisions specified in sections 76 and 77 of the *Forest Act*; and
- reduce the AAC of the IFPA holder's licence by an amount the regional manager determines is attributable to the default, regardless of whether the regional manager has previously granted an AAC increase to the IFPA holder.

Roles and Responsibility

Task	MoF	MELP	FRBC	Proponent	Public
IFPA Proposals:					
Open Invitation	A				
Proposal Preparation				A	
Review and Comment	A	I	I		I
Evaluation & Selection	A	I	I		
Agreement	S			S	
Business Plan (where required)	S	I	S**	A	
Forestry Plan					
Preparation				A	
Review and Comment	I	I	I		I
Funding			S	A	
Review and Approval	S				
Implement Forestry Plan					
Funding and Contract Negotiations	I	I	A	A	
Prescriptions and Standards Agreements	S	S*		I,A	
Quality Assurance, Compliance & Enforcement	A	A*		A	
Monitor Performance	A	A*		A	
Annual Report				A	
AAC Increase					
Prepare Submission				A	
Review and Analysis	A	I			(I)
AAC Increase	A,S				

A - Accountable I - Input Required S - Sign-off ( ) - RM's option

* MELP's sign-off of prescriptions and standards; accountability for quality assurance, compliance and enforcement; and monitoring only applies to activities that MELP is responsible to administer.

** Any proposed FRBC funding (not previously approved by FRBC) specified in the business plan will require FRBC's approval.

Key Success Factors

How the Ministry of Forests, Ministry of Environment and Forest Renewal BC will measure the contributions of the IFPA.

Ministry of Forests

The MoF will measure the contributions of the IFPAs based on:

- the measurable results of the individual innovative forestry practices and other activities carried out in accordance with the approved forestry plan;
- AAC increases, if any, under the IFPA;
- the incremental employment created under the IFPA; and,
- achieving the requirements of the Forest Practices Code.

Ministry of Environment, Lands and Parks

MELP will, according to its mandate, vision and goals, measure the contributions of the IFPAs based on:

- the measurable results of activities carried out in accordance with the approved forestry plan designed to enhance and protect non-timber values; and
- achieving the requirements of the Forest Practices Code.

Forest Renewal BC

In addition to the success factors noted above, the Corporation will view the IFPAs as successful if:

- they provide results that can be broadly applied in making investment decisions for land-based programs in future;
- they demonstrate that cost-effective treatment regimes can be designed and implemented that allow both potential increases in long term sustainable harvest levels and protection of all forest values;
- they demonstrate that the corporation's employment and partnership goals can be better achieved by the innovative management regimes tested through IFPAs.

Contacts

Local
District Manager

Regional
Regional Manager

Provincial

Drew Brazier, Resource Tenures and Engineering Branch,
1450 Government St., Victoria, B.C., (250) 387-8955.

Appendices

Appendix I: Legislation - Section 59.1 of the Forest Act
Appendix II: Innovative Forestry Practices Regulation
Appendix III: IFPA Proposal Evaluation Criteria and Process
Appendix IV: Forestry Plan Preparation Process and AAC Increase Process
Appendix V: Innovative Forestry Practices Agreements Forestry Plan Outline
Appendix VI: IFPA Forestry Plan Approval Letter (Example)
Appendix VII: FRBC Funding for IFPAs - Eligibility Guidelines for 1999/2000

Appendix I

LEGISLATION - Section 59.1 of the Forest Act

Innovative forestry practices

59.1 (1) For the purpose of improving the productivity of the forest resource, the minister, at his or her discretion, may enter into an agreement with a person referred to in subsection (2) to allow that person to carry out, subject to subsection (5) and the *Forest Practices Code of British Columbia Act*, one or more of the innovative forestry practices and other activities that are set out in a regulation made under subsection (4).

(2) For the purpose of subsection (1), the minister may enter into an agreement with a person who

(a) is the holder of a forest licence or other agreement that is entered into under section 12 and specified in a regulation made under subsection (4) of this section, and

(b) presents a written proposal for an agreement to the minister.

(3) An agreement under subsection (1)

(a) must be for a term not exceeding 15 years, and

(b) may include terms and conditions that

(i) the minister considers necessary to effectively carry out the purpose of the agreement and further the social and economic objectives of the government, and

(ii) are consistent with this Act and the regulations and the *Forest Practices Code of British Columbia Act*, and the regulations and standards made under that Act.

(4) The Lieutenant Governor in Council may make regulations specifying

(a) the innovative forestry practices and other activities that may be the subject of an agreement referred to in subsection (1), and

(b) the agreements entered into under section 12, the holders of which may enter into an agreement with the minister under subsection (1) of this section.

(5) A person may only carry out an innovative forestry practice or other activity referred to in subsection (1) if the person

(a) has prepared and obtained the regional manager's approval of a forestry plan that meets the requirements of subsection (6), and

(b) is carrying out the practice or activity in accordance with the plan.

(6) A forestry plan

(a) must contain a description of the management area where the innovative forestry practices or other activities will be carried out,

(b) must specify the particulars of the innovative forestry practices or other activities,

(c) must contain a description of how the innovative forestry practices or other activities will be carried out,

(d) must contain a schedule of when the innovative forestry practices or other activities will be carried out,

(e) must specify how the innovative forestry practices or other activities will contribute to improved productivity of the forest resource,

(f) must specify how the innovative forestry practices or other activities will justify an increase in the allowable annual cut of the participant's licence or agreement referred to in subsection (2) (a), and

(g) may include other terms and conditions that

(i) the regional manager believes are necessary to effectively carry out the agreement referred to in subsection (1), and

(ii) are consistent with this Act and the regulations and the *Forest Practices Code of British Columbia Act*, and the regulations and standards made under that Act.

(7) After approving a person's forestry plan, the regional manager may increase the allowable annual cut authorized in the person's licence or agreement referred to in subsection (2) (a) by an amount that is justified according to timber supply analysis methodology approved by the chief forester or the chief forester's designate.

(8) When the regional manager increases an allowable annual cut under subsection (7), the regional manager may limit the increase to a period of time, area of land and type of timber, and may make the increase subject to conditions.

(9) If an assessment of

(a) the innovative forestry practices or other activities being carried out under the forestry plan, or

(b) information that was not available at the time the regional manager increased the allowable annual cut under subsection (7)

indicates that all or part of the allowable annual cut increase was not justified, the regional manager may reduce the allowable annual cut of the licence or agreement referred to in subsection (2) (a) by an amount not exceeding the increase granted under subsection (7).

(10) If, with respect to an innovative forestry practice or other activity, a person is not complying with

(a) the agreement referred to in subsection (1),

(b) the forestry plan approved under subsection (5),

(c) any limitation or conditions imposed under subsection (8), or

(d) this Act and the regulations made under this Act, or the *Forest Practices Code of British Columbia Act* and the regulations or standards made under that Act,

the regional manager may do one or both of the following:

(e) suspend or cancel the agreement referred to in subsection (1) and sections 76 and 77 apply with respect to that suspension or cancellation;

(f) reduce the allowable annual cut of the person's licence or agreement referred to in subsection (2) (a) by an amount the regional manager determines is attributable to the default.

(11) A reduction under subsection (9) or (10) may be apportioned over a period of up to 5 years.

(12) If the forest licence, or other agreement referred to in subsection (2) (a), is suspended, the agreement under subsection (1) is suspended.

(13) If the forest licence, or other agreement referred to in subsection (2) (a), is cancelled or surrendered, the agreement under subsection (1) is cancelled.

(14) If the agreement referred to in subsection (1) is suspended or cancelled, the forestry plan is suspended or cancelled, as the case may be.

1996-11-9.

Appendix II

INNOVATIVE FORESTRY PRACTICES REGULATION

Definitions

1 In this regulation:

"Act" means the Forest Act;

"forestry plan" means a forestry plan required to be submitted for approval under section 59.1 (5) of the Act;

"forest practice" has the same meaning as in the Forest Practices Code of British Columbia Act;

"free-growing stand" has the same meaning as in the Forest Practices Code of British Columbia Act;

"holder" means a person that presents a written proposal for an agreement under section 59.1 (2) (b) of the Act;

"permanent access structure" has the same meaning as in the Forest Practices Code of British Columbia Act;

"standard practices" means the forest practices routinely applied by licensees in the timber supply area when the forestry plan is submitted or at any other time determined by the regional manager;

"stocking requirements" has the same meaning as in section 39 (1) of the Operational Planning Regulation, B.C. Reg. 174/95.

Authorized innovative forestry practices and activities

2 The innovative forestry practices and other activities that may be the subject of an agreement under section 59.1 (1) of the Act are the following:

(a) the implementation of harvesting methods or silvicultural systems that may

(i) increase the total amount of timber available to harvest in the timber supply area over the amount available under standard practices, or

(ii) reduce the loss of productivity associated with permanent access structures from the loss of productivity under standard practices for similar terrain and timber types in the timber supply area;

(b) activities that result in the establishment of free-growing stands on

(i) previously unforested areas,

(ii) areas that are below stocking requirements and are not part of the holder's free-growing responsibilities under section 70 (3) of the Forest Practices Code of British Columbia Act, or

(iii) areas that

(A) have stands of timber with repressed growth or that contain brush or species that are not commercially valuable, and

(B) are not part of the holder's free-growing responsibilities under section 70 (3) of the Forest Practices Code of British Columbia Act;

(c) silviculture treatments on free-growing stands;

(d) silviculture treatments on sites that are not free growing in order to produce stands that exceed current growth performance or standards achieved using standard practices for the timber supply area;

(e) the collection and analysis of new data, in accordance with the specifications of the chief forester, to provide a more accurate representation of the forest composition and its expected rate of growth compared to the rate existing when the forest plan is submitted or at any other time determined by the regional manager;

(f) activities that will enhance and protect other resource values, including, but not limited to, water, fisheries, wildlife, biological diversity, soil productivity and stability, forage production, grazing and recreation values.

Authorized forms of agreement

3 The holders of the following agreements under section 12 of the Act may enter into an agreement under section 59.1 of the Act:

(a) replaceable forest licences, and

(b) replaceable timber sale licences with an allowable annual cut greater than 10 000 cubic metres.

Appendix III

IFPAs -- Proposal Evaluation Criteria and Process

(Nelson Forest Region)

Terms of Reference

- To invite proposals for the Nelson Innovative Forestry Practices Proposal this season;
- To invite proposals from major licensees (i.e. holders of replaceable forest licences and holders of replaceable timber sale licences with an AAC greater than 10 000 m3) in any of the Nelson Region's TSAs;
- To provide MELP, government authorized planning groups and the public with an opportunity to review and comment on the proposals;
- To evaluate the proposals and comments and make recommendations to the minister.

Conditions

- While proposals by individual licensees are permitted under the legislation, the selection criteria for the Nelson Pilot will favour proposals that emphasize, cooperative, community-wide (including First Nations) involvement.
- Proposals that present creative partnerships involving the SBFEP or TFLs will not be rejected for including the SBFEP or TFLs, but neither the SBFEP nor TFL will be eligible for any AAC gains under Section 59.1. An IFPA applies exclusively to major licences in TSAs. Likewise, the funding of creative partnerships involving the SBFEP or TFLs will requires specific approval of FRBC.
- The evaluation process will examine the performance of major licensees, and the expected benefits of their IFPA proposal. Benefits from creative partnerships involving SBFEP or TFLs may be identified, but must be kept tallied separately in the proposal.
- The IFP legislation specifies the eligible categories of innovative forestry practices. Proponents should examine the details of each category, as spelled out in the IFP Regulation.
- The agreement requires the company to submit a forestry plan to the Regional Manager for approval. The term of the agreement will be determined by the Minister.
- The Regional Manager will entertain applications for an AAC increase from an IFPA holder, in conjunction with the Chief Forester's Timber Supply Review. This scheduling will be specified in the forestry plan approved by the Regional Manager.
- AAC changes due to IFPAs are subject to proof of results. If at a later date it is determined that an increase was not justified, the increase may be rolled back. Also, the AAC can be reduced if the licensee(s) does not live up to the agreement or the forestry plan, or violates the Forest Practices Code or the Forest Act, or any conditions attached to an approved AAC increase. In this event the Regional Manager may reduce the licence AAC by an amount that is attributable to the default, which could exceed the amount of the AAC increase.

- Compliance monitoring is a condition of the Nelson Pilot. Specifically, achievement of the objectives of the legislation, the IFP Agreement and the forestry plan will be assessed no more than 5 years after initiation. A key area for monitoring will be whether the IFPA has met the goals of the Jobs and Timber Accord.

- There are no appeal provisions for the Minister's decision.

Process and Deadlines:

See attached Table 1. All materials must be routed to the Regional Manager, Nelson Forest Region.

Evaluation Criteria for Proposals:

See attached Table 2.

Deadline for Proposals:

4:30 PM
February 2, 1998
Nelson Forest Region office

For more information contact:

John Pollack, R.P.F.
AAC Mitigation Strategy Team Leader
Ministry of Forests
518 lake Street
Nelson, B.C.
V1L 4C6

Table 1. Process and Deadlines for the Innovative Forestry Practices Agreement / Nelson Forest Region

Task	Responsibility	Due Date	Comments
Invitation for Proposals	Regional Manager	Oct. 17, 1997	Letter to all major licensees with specific timetable and selection criteria.
Public Information Meetings	Region	Nov. 3-7. 1997	Public information meetings advertised and held in Nelson and Cranbrook.
Deadline for Proposals	Proponents	Feb. 2, 1998	Major Licensees only.
Advertisement for stakeholder comments	Proponents	Feb. 2, 1998	Advertisements in papers of affected TSAs. Letters to affected municipalities, regional districts, and duly constituted forest planning groups. Comments received by proponents up to 4 weeks after advertisement.
Deadline for revisions to original proposal	Proponents	Mar. 13, 1998	
Proposal Evaluation	Regional Evaluation Team	Mar. 23, 1998	
Recommendation to Minister	Regional Manager	Mar. 31, 1998	
Ministerial Approval	Minister		

Table 2. Innovative Forestry Practices Agreement Selection Criteria / Nelson Forest Region

Category	Objectives	Evaluation	Points
Eligibility	** Proposals will be accepted from one or more major licensees in a TSA, and may be accepted for more than one TSA.	Major Licensee(s) in a TSA must be central to the proposal.	Pass/Fail
Past Performance	Consideration will be given to applicants who:		
	** Have met past commitments over the long term (practices required by legislation).	* Proponents to provide 5-year history of cut-control, harvest infractions (# infractions vs. # inspections), site disturbance statistics, basic silviculture (planting, prescribed fire, MSP and brushing), regeneration delay & free-growing statistics.	20
	** Have and continue to carry out innovative practices (practices incremental to legal requirements).	* Proponents to provide 5-year history and description of all innovative practices and projects.	20
	** Have demonstrated they are committed to community involvement, including First Nations, in their operations and decision making.	* Proponents to provide 5-year history and description of public and special initiatives, meetings and events beyond legislative requirements. Highlight joint decision making and collaborative efforts.	20
Jobs	** The proposal must include a jobs plan that commits to maintaining and enhancing employment in the area.	* Document PYs of employment/1000 m3 and total PYs presently maintained by proponent(s) in harvest primary breakdown, forest management, and value-added wood processing activities. Each activity to be listed separately. Specify First Nations %.	30
		* Document PYs/1000 m3 and total PYs that will be created by the proposed plan, in harvest, primary breakdown, forest management and value-added wood processing activities. Each activity to be listed separately. Specify First Nations %.	30

Table 2. Innovative Forestry Practices Agreement Selection Criteria / Nelson Forest Region

Government Objectives	The proposal must demonstrate:		
	** How innovative forestry practices and other activities in the proposal will improve the productivity of the forest resource.	* Demonstrate strategy and knowledge of treatments, techniques and methodologies that can improve forest productivity and/or reliability. Demonstrate a program and solutions specific to the TSA.	30
	** How it relates to other objectives of government in respect of environmental quality and the management of water, fisheries, and wildlife resources and cultural heritage resources.	* Demonstrate strategy and approach to conservation, amelioration or inventory of these resources.	15
	** How the proposal will facilitate local community (and First Nations) involvement.	* Specify strategy for involvement of various communities in forest management activities, planning and decision making. Highlight cooperative ventures and joint decision making with communities. Other stakeholders and licensees.	30
Opportunity	The Proposal must demonstrate:		
	** How it meets the needs of the TSA.	* Proponents to describe the AAC history of the TSA, the known impacts of the Kootenay Boundary Land Use Plan, and the expected wood supply mitigation effects of this proposal. Discuss the likelihood of success.	30
	** The coverage of the TSA by the proposal.	* Proponents to describe the percentage of productive forest in the TSA covered by the proposal.	30
TOTAL POINTS			255

Appendix IV

IFPA Forestry Plan Preparation Process and AAC Increase Process

(based on the TFL management plan preparation process)

Months to For. Plan	IFPA Forestry Plan/AAC Increase Activity	Responsibility
24 Months	Licensee and Minister enter Innovative Forestry Practices Agreement (IFPA).	Licensee & Minister
	OR	
24 Months	RM provides outline for forestry plan (FP) or indicates new forestry plan required. RM (or FRBC) may require a business plan (BP). RM provides outline for FP.	RM RM RM
24-22 Months	IFPA Holder works with Regional MOF staff to identify preliminary IFPA area (may be unnecessary where entire TSA is included in IFPA).	IFPA & MOF
22-20 Months	IFPA Holder prepares BP, which identifies the work (plus costs) to prepare FP. If RM does not require a BP IFPA holder begins preparation of FP	IFPA
20 Months	IFPA Holder submits BP to RM and, if applicable, to FRBC.	IFPA
19 Months	Regional MOF Staff and FRBC accept BP or recommend additional work.	MOF & FRBC
18 Months	IFPA holder begins preparation of FP. IFPA holder interacts with MOF in preparation of FP to address following elements: • Base Case information requirements • Base Case timber supply analysis • Forest Management Strategy options • Sensitivity analysis for options (FP outline) Region sends notice with information requirements for **Base Case** timber supply analysis	IFPA (& MOF) TS Forester
16 Months	IFPA holder submits Base Case timber supply analysis information package to TS.	IFPA
13 Months	TS Forester (Branch assistance if required) completes review of Base Case information package. RM reiterates requirements for options and sensitivity analysis (as per FP outline)	TS Forester RM
10 Months	IFPA holder submits Based Case timber supply analysis and sensitivity analysis for each option (RM may require this be available for public input).	IFPA
7 Months	TS Forester(Branch assistance if required) completes review of Base Case analysis & sensitivity analysis. RM accepts or rejects analysis. RM advises IFPA holder on referring FP	TS Forester RM RM
6 Months	IFPA holder submits preliminary FP, including sensitivity analysis, forest management strategy options, chosen option and why it was chosen. IFPA holder refers FP as per RM's instructions (agencies , public, etc), revises FP and submits revisions to RM.	IFPA IFPA
3 Months	Agencies & public provide comments RM provides comments on FP to IFPA Holder.	Agencies/public RM
0 Months	IFPA Holder submits proposed FP to RM, with input received from the public and other resource agencies.	IFPA
Months to FP Approval		
6 months	**RM approval of the Forestry Plan (if RM does not approve FP, RM gives reasons)**	**RM**

Months to AAC Increase	Activity	Responsibility
	IFPA holder begins preparing project or operational plans for individual practices according to the schedule in the FP.	IFPA
	According to RM's approval of FP, IFPA holder proceeds in one of two ways: a) prepares application for AAC increase based on commitments & projections in approved FP, or b) conducts practices according to FP, & applies for AAC increase based on performance or results.	IFPA
0 Months	RM gives go-ahead to apply for AAC increase in accordance with approved FP, conditions of the RM's approval and practices conducted.	RM
2 Months	IFPA Holder submits Timber Supply Analysis Information Package for **Enhanced Case**, based on process approved by RM.	IFPA
5 Months	TS Forester (Branch assistance if required) reviews the Timber Supply Analysis Information Package and makes recommendation to RM. RM accepts or rejects information package.	TS Forester RM
8 Months	IFPA holder conducts Timber Supply Analysis for Enhanced Case and requests RM increase AAC. (If required by RM, IFPA holder makes AAC request available for public input.)	IFPA
11 Months	TS Forester (Branch assistance if required) reviews the Enhance Case analysis and makes recommendation to RM.	TS Forester
12 Months	**RM determines AAC Increase & provides rationale**	**RM**

Note: This document provides a general indication of the steps and time frames that are expected for the IFPA processes of preparing a forestry plan and applying for an AAC increase. The steps and time frames for individual IFPAs may deviate significantly. 24 months for preparation and submission of the forestry plan and 6 months for approval of the forestry plan are the normal maximums, but both periods may be shorter.

Appendix V

IFPAs – Forestry Plan Outline

INNOVATIVE FORESTRY PRACTICES AGREEMENTS

Forestry Plan Outline

Resource Tenures and Engineering Branch

April,2000

INTRODUCTION
LEGISLATION
CONTENT REQUIREMENTS

1. *Description of Agreement Area including Current Practices, Standards, Issues and Inventory of the Agreement Area. [sec. 59.1(a)]*
   - 1.1 Written Description
   - 1.2 Exhibit A Sketch
   - 1.3 Current Uses/Values and Community Dependence
   - 1.4 Inventories
2. *Innovative Forestry Practices and Other Activities. [sec. 59.1(b)&(c)]*
   - 2.1 Strategic Analysis
   - 2.2 Particulars of the Proposed Activities
   - 2.3 Management Objectives
   - 2.4 Economics *[sec.59.1(g)]*
   - 2.5 Productivity gains
3. *Work Plan and Five Year Schedule [sec. 59.1(c)&(d)]*
   - 3.1 Planned Treatments
   - 3.2 Employment *[sec. 59.1(g)]*
   - 3.3 Operational research / Monitoring
   - 3.4 Funding source / Investment plan
   - 3.5 Net expected AAC gain
   - 3.6 Future management plans
   - 3.7 Communications/Extension
4. *Timber Supply Analysis [sec. 59.1(e)&(f)]*
   - 4.1 Base Case Timber Supply Analysis Methodology
   - 4.2 Innovative Practices Scenario(s)
5. *Appendices (to the forestry plan*

APPENDICES (to the Outline)

1. The "Provincial Guide for the Submission of Timber Supply Analysis Information Packages for Tree Farm Licences" (not included)
2. Application for an AAC Increase
3 Timber Supply Analysis Considerations

INTRODUCTION

The Forestry Plan Outline is based on the provisions of the *Forest Act* and the terms and conditions specified in the Innovative Forestry Practices Agreements (IFPAs). The content of the forestry plan should be consistent with the commitments in the IFPA holder's proposal. The regional manager may impose terms and conditions in addition to or to replace those in the outline.

The forestry plan should be considered an investment plan that identifies opportunities to improve the productivity of the forest resource. The forest resource includes both timber and non-timber values. The forestry plan defines the IFPA area and innovative forestry practices and other activities that will improve forest productivity, and provides a schedule of activities for one or more treatment regimes. Also, in preparing the forestry plan, the IFPA holder should examine several different innovative forestry management scenarios before selecting a forest management regime.

LEGISLATION

According to section 59.1 of the Forest Act, the forestry plan:

(a) must contain a description of the management area where the innovative forestry practices or other activities will be carried out,

(b) must specify the particulars of the innovative forestry practices or other activities,

(c) must contain a description of how the innovative forestry practices or other activities will be carried out,

(d) must contain a schedule of when the innovative forestry practices or other activities will be carried out,

(e) must specify how the innovative forestry practices or other activities will contribute to improved productivity of the forest resource,

(f) must specify how the innovative forestry practices or other activities will justify an increase in the allowable annual cut of the participant's licence [forest licence or replaceable timber sale licence with an AAC greater than 10 000 cubic metres], and

(g) may include other terms and conditions that

  (i) the regional manager believes are necessary to effectively carry out the agreement referred to in subsection (1) [of section 59.1], and

  (ii) are consistent with this Act and the regulations and the *Forest Practices Code of British Columbia Act*, and the regulations and standards made under that Act.

CONTENT REQUIREMENTS

1. Description of Agreement Area including Current Practices, Standards, Issues and Inventory of the Agreement Area. [sec. 59.1(a)]

1.1 Written Description

- Approximate location of area.

1.2 Sketch Map

- Boundaries should follow well-defined features such as roads, rivers, heights of land, etc., but not timber types.

1.3 Current Uses/Values and Community Dependence

- describe current uses (recreation, cultural, etc.) for the general IFPA area and identify the types of uses that are expected to continue for the next five years;
- describe existing conservation values (i.e., type and location of caribou winter ranges, unstable terrain, old growth biodiversity values, endangered species, major stream and river system and fisheries values, community watershed, and access concerns for wilderness recreation) made known to the licensee in accordance with the Forest Practices Code and expected to be a constant environmental concern over the next five years;
- describe the type and location of the existing timber processing facilities to which logs and fibre flow.
- describe for each of harvesting and forestry the current employment levels, by licensee and program (MoF silviculture, Forest Renewal BC, etc.) for the entire IFPA area.

1.4 Inventories

List the existing inventories. Particular focus should be given to how inventories will be used for estimating gains from the agreement and for selecting treatment opportunities. These are not limited to gains in timber, but where consistent with the commitments under the IPFA, will also include gains in economic values, biodiversity, habitat, etc.

2. Innovative Forestry Practices and Other Activities. [sec. 59.1(b)&(c)]

2.1 Strategic Analysis

As part of the forestry plan the IFPA holder should undertake and provide results of a strategic analysis that examines the forest estate on the IFPA area. The strategic analysis would compare and test a number of different innovative forestry management scenarios with the intent of selecting appropriate forest management regime(s).

2.2 Particulars of the Proposed Activities

For each category indicated below, describe the activities that are planned to be carried out as part of this IFPA, the methods to be used (techniques and equipment) and their role in meeting the management objectives outlined in section 2.3. Also, define the general criteria to be used to select treatment opportunities.

- Pre Free Growing Silviculture
- Post Free Growing Silviculture
- Harvest Methods
- Forest Health
- Silvicultural Systems
- Inventory
- Enhancement and Protection of Non-timber Values
- Other

2.3 Management Objectives

The management objectives are to be described for the various forest resources found on the IFPA area and how they will be enhanced or affected by activities specified in 2.2. They must be measurable objectives consistent with existing higher level plans (e.g., LRMPs and LUOs) and the forest development plan.

2.3.1 Timber

The management objectives must address the long term sustainable harvest; and corresponding profile and fibre requirements. Objectives could include the following:

- product mix
- harvest flow (long term sustainability, gradual controlled change)
- stand level objectives for treatments by stand type (value and volume as applicable);
- minimum harvest age and minimum volume and diameter requirements;
- forest level volume targets for fibre flow by diameter class and species, rotations expected;
- utilization standards for commercial thinning, stand conversion and alternative silviculture systems.

2.3.2 Conservation and enhancement of non-timber values

The IFPA holder is committed to protecting non-timber values as required in the Forest Practices Code. Where, under the IFPA, the holder has committed to protecting and enhancing non-timber values, the IFPA holder will identify the non-timber values and the corresponding management objectives.

The management objectives must comply with the requirements of the Forest Practices Code, including higher level plans. Regardless of whether the IFPA commits the holder to protecting and enhancing non-timber values, nothing in the forestry plan can override the Code requirements of adequately managing and conserving the forest resources.

- Stand level objectives
  - stand level objectives for treatments by stand type (coarse woody debris, wildlife and stand structure applicable).

Where, under the IFPA, the IFPA holder has committed to protecting and enhancing recreation, biodiversity, wildlife, or water and fish, the IFPA holder will present the management objectives in the following context:

- Recreation
  - commercial and non-commercial recreation.
- Biodiversity
  - seral stage distributions within landscape units over time linked to the proposed activities in 2.2.
- Wildlife
  - known identified wildlife species, known ungulate winter ranges and species at risk that have had a recovery plan approved by cabinet, occurring within the IFPA area, their status and habitat objectives, and how the habitat will be supplied over time; measurables may be in the form of hectares of habitat and seral stage condition, location or forest cover requirements needed for maintenance of habitat and seral stage condition, and areas where enhancements and investments are made.
- Water and fish
  - clearcut equivalency for landscape units and/or watershed assessments for sensitive watersheds within the IFPA area.

2.3.3 Employment *[sec. 59.1(g)]*

Where the IFPA commits the holder to maintaining and enhancing employment, the forestry plan will include the following:

- project based employment objectives for treatments by stand type;
- describe the short (5 years) and long term (IFPA term) net employment gains by job category, including such activities as silviculture, inventory, harvesting and timber processing, to the province as a result of this IFPA;
- describe generally who will be employed (First Nations, displaced forestry workers, existing silviculture workers) and how they will be hired (direct or competitive award contracts, licensee crew, stewardship arrangements);
- specify the benchmark employment level by job category.

2.4 Economics *[sec.59.1(g)]*

Demonstrate that the timber products expected from the planned activities will realistically provide economic products (e.g., that a specific silviculture regime would produce a piece size from which an economic wood product could be produced), and demonstrate that the benefits resulting from each planned activity can be reasonably expected to exceed the costs.

2.5 Productivity gains

Describe quantitatively how planned treatments will improve productivity of the forest resource. Specifically, describe how they will enhance timber productivity (i.e., achievement of site potential) and how they will enhance or impact non-timber values (biodiversity, habitat, forage, etc.).

3. Work Plan and Five Year Schedule [sec. 59.1(c)&(d)]

Using the management objectives, present one or more management regimes encompassing all of the planned innovative forestry practices for all five years of the forestry plan. Each management regime must address the following:

3.1 Planned treatments

Identify the planned treatments, including re-inventory for each of the next five years.

3.2 Employment *[sec. 59.1(g)]*

Using the same process as was done in section 2.2 of this forestry plan, summarize the net gains in employment by job category, including such activities as silviculture, inventory, harvesting and timber processing.

3.3 Operational research / Monitoring

Describe how operational research will be carried out and how the results of the treatments carried out under this forestry plan will be monitored.

3.4 Funding source / Investment plan

Identify the planned funding source(s) and projected expenditures by treatment and year.

3.5 Net expected AAC gain

Summarize how each management regime will meet each stated management objective for the forest resources (timber and non-timber) and project an expected AAC gain (in percent).

3.6 Future management plans

For each area treated, identify the future management plans such as the next commercial entry, final harvest, and anticipated silvicultural system.

3.7 Communications/Extension

Consultation through advisory groups to coordinate dissemination and communication of results of activities

4. *Timber Supply Analysis [sec. 59.1(e)&(f)]*

Normally, there are at least two distinct timber supply analyses associated with the forestry plan. The initial analysis is to establish the base case. The later analysis, which follows approval of the forestry plan, is intended to estimate the response in timber supply to the innovative forestry practices and other activities carried out under the forestry plan. It represents the innovative practices scenario.

It is intended that the forestry plan describe the practices, assumptions and timber supply analysis methodologies the IFPA holder proposes to use for the innovative practices scenario(s). The analysis for the innovative practices scenario(s) and corresponding results will be a subsequent and separate submission identified as the "Application for an AAC Increase" (Appendix 2).

The *Forest Act* requires that the analyses for the base case and innovative forestry practices scenario(s) be consistent with the methodology approved by the chief forester or designate. The "Provincial Guide for the Submission of Timber Supply Analysis Information Packages for Tree Farm Licences" provides a framework for data submission and methodology description and may be supplemented by the regional manager. It has been used to assist in preparing analyses for chief forester consideration during AAC determinations. As such, data and analyses prepared as outlined in the guide should meet chief forester standards. Approval will be made on a case specific basis. If alternative methodologies are proposed, they must be submitted for approval by the chief forester or designate either before submitting the forestry plan (base case) or as part of the forestry plan (innovative practices scenario).

4.1 Base Case Timber Supply Analysis Methodology

4.1.1 Information Package

- Describe the timber supply analysis methodology, assumptions and, as an indication of the normal level of activities, the standard practices to be used in modelling the timber supply for the IFPA area base case and, where required by the regional manager, the rest of the TSA. Standard practices are current and past practices (since the last timber supply review) for the IFPA area (e.g., planting genetically improved stock, brushing, spacing, pruning, fertilization, etc.).

  NOTE: The regional manager may require the information package to be submitted before the base case timber supply is modelled.

4.1.2 Modelling the Base Case Timber Supply

- Submit a base case timber supply analysis for the IFPA area that models current practices, consistent with the data and methods outlined in the information package, to assist in estimating potential AAC gains from innovative forestry practices.
- Where required by the regional manager, the IFPA holder will also submit an analogous timber supply analysis for the area of the TSA not under an IFPA.
- Appendix 3 includes timber supply analysis considerations that should be addressed when performing analysis

4.2 Innovative Practices Scenario(s)

Identify how the planned treatments, harvest planning or improved inventories will result in increases to the timber supply. This must also be specific to where or in which types of timber the gains will be such as species and location.

4.2.1 Innovative Practices Scenario Timber supply analysis methodology

- Describe the timber supply analysis methodologies, assumptions and planned practices pursuant to sections 2 and 3 to be used in assessing timber supply under innovative practices for the IFPA area. The methodologies will include modelling of requirements for the full range of objectives under the Code and any existing plans applicable to the area.
- Identify one or more innovative practices scenarios above the base case and provide the results of sensitivity analysis that addresses uncertainty in variables such as Site Index, funding levels, future market prices, treatment costs, future harvest costs.

5. *Appendices (to the forestry plan)*

I IFPA Area - Exhibit A sketch

II Timber Supply Analysis Information package for the Base Case
(see APPENDIX 1 of the forestry plan outline)

III Timber Supply Analysis for the Base Case - Results

IV Inventory standards

V Monitoring plan

VI Annual Reporting plan

APPENDICES (to the outline)

1. The "Provincial Guide for the Submission of Timber Supply Analysis Information Packages for Tree Farm Licences" (available from the regional manager)
2. Application for an AAC Increase
3 Timber Supply Analysis Considerations

APPENDIX 1.

Provincial Guide for the Submission of Timber Supply Analysis Information Packages for Tree Farm Licences

Copies available from the Regional Manager

APPENDIX 2.

Application for an AAC Increase

An application for an AAC increase will include innovative forestry practices scenarios, modelled using timber supply analysis methodologies identified in the approved forestry plan.

1. Information package

An information package is required to model the timber supply for the innovative forestry practices scenario(s). The information package may be submitted before the application for an AAC increase or as part of the application. Normally, the information package will not be submitted as part of the forestry plan.

2. Additional information

An application for an AAC increase will include the following:

- categorization of areas within the timber harvest land base of the IFPA area by
  a) the type and quality of timber, and
  b) the harvesting methods suitable;
- specific location and hypothetical scheduling for harvesting during the short term (next 5 yrs.) and the long term (20 yrs.) to demonstrate the spatial feasibility of harvesting the full AAC, including the proposed AAC increase. A period of 20 years will exceed the term of the IFPA, but an increased AAC may continue beyond the term of the IFPA.

Appendix 3.

Proposed Timber Supply Analysis Considerations for Innovative Forest Practices Agreements

Section 59.1 (7) of the *Forest Act* allows regional managers, after approving an IFPA forestry plan, to increase the allowable annual cut of the holder's forest licence by an amount that is justified according to a timber supply analysis method approved by the chief forester or the chief forester's designate. The purpose of the following discussion is to outline the timber supply analysis method and allowable annual cut decision principles used by the chief forester. The discussion provided here does not constitute an official approval of a method by the chief forester; however, the points provided have been reviewed by the chief forester and Timber Supply Branch staff.

Following are components of timber supply analysis are crucial in gaining an understanding of the factors that determine timber supply in an area. This understanding is critical in making informed harvest level decisions. Because of the complexities involved in determining harvest levels, it is not possible to develop precise procedures or simple calculations for timber supply analysis. The process can be guided by general principles—which are outlined below—however, the detailed aspects must be developed using case specific professional judgement. In this light, the following ideas are provided as guidance, not as firm procedural requirements that must be followed in all cases. While the general ideas apply in almost all cases, each case must be viewed as unique: some cases may require additional analysis to that outlined, while others may be assessed satisfactorily with less detail than have suggested.

> **If a timber supply analysis incorporates the types of information noted below, and facilitates evaluation of the considerations discussed, it will have followed a timber supply analysis method supported by the chief forester.**

The discussion focuses on an analytical method. The results of any analysis depend heavily on the quality of the information used in the analysis; that is, information about the forest land base, growth and yield, and management objectives. The chief forester's task under the *Forest Act* is to provide an analysis method, not to evaluate, or provide a method for evaluating information quality. Hence, the discussion here does not address information quality. Evaluation of information quality must be done on a case-specific basis, which regional managers, in their evaluation of IFPA analyses, are best positioned to do.

Analysis methods should consist of:

Land base:

- A tabular description of the categories of land and forest that are excluded from the timber harvesting land base, and the area excluded in each category. Such tabular

descriptions are included in all timber supply analysis reports published for TSAs as part of the Timber Supply Review.

- A detailed description of the criteria employed in deriving the area included in the above table. This description should follow a format similar to the Information Package for Tree Farm Licence analyses.
- A description of the composition of the timber harvesting land base and the total forested land base in terms of species, site quality, stand age, and any other features relevant in the area.

Growth and yield:

- A description of the models and methods used in generating timber yield tables for existing and regenerated stands.
- The yield tables used for each species and site quality group and silvicultural regime.
- Detailed descriptions of methods and concepts underlying site productivity estimates and yield tables that reflect any planned innovative management.
- Notice of acceptance by appropriate BC Ministry of Forests staff of site productivity or yield estimates or adjustments corresponding to both baseline and innovative practices, and of any sampling or study methods related to deriving the estimates.
- MoF, Regional Growth and Yield Foresters will coordinate the growth and yield review process.

Management objectives:

- A description of the various management objectives that apply to the area and the methods used to represent actions used to achieve the objectives (e.g., silvicultural regimes, utilization levels, seral forest cover requirements, extended "rotations," alternative harvesting systems). The description should specify the component of the land base to which the objective applies; for example, timber harvesting land base, or Crown forested area. The template for Information Packages for Tree Farm Licence analyses provides a framework for organizing relevant information.

Analysis is facilitated if communication between relevant ministry staff and the agreement holders regarding land base, growth and yield, and management inputs occurs as early as possible in the analysis process.

Other considerations include:

Model review and benchmarking. There are no specific requirements or limitations on which analysis models may be used. However, it is important to understand in some detail how a model functions to enable interpretation of results, and to ensure that timber supply effects can be attributed confidently to innovative practices rather than model differences. The best method of gaining this understanding is to benchmark the model with FSSIM. If a model other than FSSIM, which has not been reviewed and benchmarked by Ministry of Forests staff, is to be used, the agreement holder should develop a review process in cooperation with Timber Supply Branch or a regional timber supply analyst. If the model being benchmarked produces different results from FSSIM, the agreement holder or its representative should be responsible for explaining the

differences in detail in a technical document.

Even with a benchmarked model, the potential to increase harvest levels should be evaluated using the same model for both current and innovative practices. For example, a timber supply forecast corresponding to an innovative management regime and generated with a model other than FSSIM should not be compared directly to a forecast derived using FSSIM and the current management regime. Using results generated with the same model will help ensure any timber supply increase is based on management not model differences.

Results and reporting. The analysis report and related appendices should include sufficient output information to allow understanding of the main factors determining timber supply, and if applicable, reasons behind timber supply changes due to proposed innovative practices. Management, land base and growth and yield assumptions are to be documented in an Information Package. The timber supply analysis should demonstrate how these assumptions affect timber supply. The outputs should allow for examination of all relevant forest management objectives; for example, areas in seral stages by landscape unit, or area not achieving visually effective green-up in visual management zones. Outputs related to timber inventory levels, areas and average volumes harvested, average age of harvested stands, and age class distributions over time all assist in understanding timber supply dynamics and evaluating the feasibility and realism of analysis results.

Sensitivity analysis. The analysis report must include results of sensitivity analyses that examine a reasonable range of uncertainty around management, land base and growth and yield assumptions and proposed innovative practices. The implications of changes in available funding to undertake planned innovative practice may be an important consideration for sensitivity analysis.

Operational feasibility. The analysis should examine any issues that may affect the operational feasibility of harvesting at the levels indicated. The most common issue involves the ability to locate harvest opportunities spatially.

Interactions between IFPA area and the TSA. IFPA timber supply analysis should demonstrate that any harvest level increases related to IFPAs will not disadvantage timber supply at the TSA level, or timber supply available to other operators in the TSA. An IFPA area may not be representative of the forest and management conditions for the TSA, and hence analysis results for the IFPA area should not be extrapolated and assumed to apply to the whole TSA.

Administration of IFPAs is the purview of the regional manager, and it is the regional manager's prerogative to require or request any analysis that s/he believes will assist in clarifying matters regarding IFPA AACs. It may be appropriate to investigate, using timber supply analysis, the advantages and disadvantages of different approaches to administering timber supply in the IFPA in the context of the TSA. For example, benefits may be gained by administering timber supply flexibly at the TSA level rather than combining timber supplies that have been assessed separately for sub-units of the TSA. Ultimately, the regional manager will decide on the administrative approach, and the analysis must be consistent with that approach.

The intent here is to highlight that analysis must show that timber supply benefits for IFPAs will not come at the cost of supply at the TSA level or other operators in the area.

Harvest flow. Timber supply forecasts employing assumptions/estimates of both current and proposed innovative practices must follow reasonable flow patterns over time. In general, a reasonable flow pattern provides for a controlled and gradual transition from short-term to medium- and long-term harvests, and avoids large and abrupt disruptions in supply. Considerations include: rate of harvest level decline if any is necessary; the degree to which mid-term timber supply may appropriately drop below the long-term sustainable harvest level; and the timing of increase to the long-term sustainable timber supply if it is higher than mid-term levels.

A difference between mid-term and long-term levels may be justified because mid-term supply depends more on the existing stock of timber and the timing of availability of regenerated stands, while long-term timber supply is based on timber growth which is affected by site productivity and forest management practices. Maintaining mid-term levels above or equal to the long-term level could in some circumstances delay the achievement of, or lead to failure to achieve the maximum long-term level, or cause timber supply disruptions, because of limited supply of existing timber. Likewise, a decline in timber supply from a higher short-term supply to a lower mid-term may be appropriate if it can be shown that the associated harvests do not jeopardize or cause disruptions in long-term productivity.

The analysis should include different harvest flows that examine each of these considerations. A "base case" harvest flow for current practices must be chosen from the range of possibilities. The choice should be explained. In most cases this explanation can be brief, and consist primarily of reference to alternative harvest flow patterns. The IFPA base case harvest flow should reflect that used in the Timber Supply Review base case, if relevant. This will ensure that any change in short-term timber supply is due to changes in management, not harvest flow.

The analysis report should describe the criteria used to determine:

- the long-term harvest level and growing stock (criteria for sustainability);
- the harvest flow (e.g., maintain current harvest level for as long as possible, maximize volume harvested over a specified time frame, control the rate of decline);
- the minimum harvest level allowed in the medium term.

Allowable cut increases. Harvest forecasts for many management units in B.C. show declining timber supply over a period of decades. The general approach in cases of declining timber supply is that short-term allowable cuts are not usually increased unless there is a sound demonstrated forest management reason. This approach ensures that allowable cuts are not increased in the short term only to force reductions in the near future. There may be sound forest management reasons, such as existence of high risk of loss of stands to fire, insects or disease due to current or developing stand attributes (e.g. aging, diameter distribution favourable to beetle attack, etc.).

An AAC increase in the short term should not decrease future timber supply below the levels forecast without the increase, unless there is a documented and compelling reason to do so.

The general approach described above for TSA and TFL AAC determinations with

respect to potential increases leads to some issues for IFPAs. One of the explicit aims of the IFPA initiative is to allow AAC increases for IFPA holders. However, one stipulation of an increase is that other license holders will not be negatively affected by any AAC increases for the IFPA. In this context, important considerations in designing and interpreting an IFPA timber supply analysis would include:

- what are the forest management reasons that justify an AAC increase?
- what effects would an increase have on future timber supply?
- would a boost in AAC increase the sensitivity of future timber supply to uncertainties?
- if the forecast is for a temporary short-term increase (that is, timber supply is forecast to decline from the higher level) what actions will be taken to mitigate or avoid future socio-economic impacts? In other words: in the absence of a forest management objective for increasing the AAC, how will a temporary increase assist in strengthening the long-term role of timber harvesting and processing in the social and economic fabric of the area (capacity-building, diversification, etc.)?

Consistency with legislation and policy. The land base, growth and yield and management regime modeled in the analysis should be consistent with current legislation and policy. While the need for consistency with laws and policy is perhaps self-evident, it must be acknowledged that one of the goals of IFPAs is to move management in new directions. Therefore, it is imperative that modeling of proposed innovative management does not imply conflicts with legislation and policy. This analytical consideration differs from the approval of innovative management that is the regional manager's responsibility as part of forestry plan approval. The intent here is to highlight the need to evaluate analysis inputs and results to ensure that they do not create or imply conflicts. If a timber supply forecast is based on conflicts with designations or objectives that are the responsibility of other statutory decision makers under existing laws or policies, that forecast cannot reasonably be accepted as a basis for harvest level determination.

Relationship between chief forester (TSA) and regional manager (IFPA) determinations. The concern has been raised that AAC determinations for TSAs under Section 8 of the *Forest Act* may conflict in some way with AAC determinations for IFPAs. Communication between the chief forester and regional manager will be necessary to avoid discrepancies or conflicts regarding AAC determinations. It is not possible to generalize about the relationship between TSA AAC determinations and related to IFPAs given the diversity of timber supply conditions across the province.

A guiding principle for TSA and TFL AACs is that the determination should reflect current or reasonably foreseeable practices. Use of the preceding method and considerations should ensure that practices approved under IFPAs will constitute current or reasonably foreseeable management, and will be considered as such in TSA AAC determinations.

Documentation of decisions. Documentation of reasons for decision is useful to ensure the bases for the decision are clear and understandable. Further, both the regional manager and the chief forester have AAC determination responsibilities under the *Forest*

Act. Reasonably detailed decision documentation, referring to the technical considerations discussed in this methods document, would help ensure consistency between regional manager and chief forester determinations, particularly when the time period between the decisions is long.

Appendix VI

IFPA Forestry Plan Approval Letter

(Example)

[DATE]

Dear [IFPA Holder]:

I have reviewed your June 3, 1999 Forestry Plan for the Arrow Innovative Forestry Practices Agreement, and I have determined that the Plan is adequate, reasonable and submitted in accordance with Section 59.1 of the *Forest Act* and the IFPA Regulation.

During my consideration, I have reviewed your Plan for consistency with the original Arrow IFPA proposal and with the IFPA Handbook, and consulted with both FRBC and MoELP before determining the Plan is adequate in addressing the requirements of the Act.

I note the IFPA Forestry Plan has been made available to the public through a process of open houses, letters, meetings with stakeholder groups, and posting of the draft Forestry Plan on a website. Copies of the publics referral letters and of the IFPA's written letter replies have been received, and I find that the public referrals have been dealt with in an adequate and reasonable manner. I note further the draft IFPA Forestry Plan has been finalized in a manner that substantively addresses the public concerns.

The plan contains a number of clauses that are critical to the successful implementation of this Pilot Project, and some advisement on my part is warranted, bearing in mind this is the first IFPA Forestry Plan to be approved in the province:

1. Approval of the Forestry Plan does not supersede or fetter the statutory decision-making authorities, and the Plan holders will comply with existing legislation, policies and guidelines.

2. The Forestry Plan provides for an annual Work Plan - Appendix 12 - starting in February, 2000, as a mechanism to accommodate new information as a result of IFPA activities, changes in policy, and budget fluctuations. The annual Work Plan will be considered as a request for a major amendment to the Forestry Plan, and will undergo a 30-day advertised review period prior to approval, to ensure an opportunity for public comment on the IFPA as it evolves.

3. An annual IFPA review meeting is planned for March of every year, to discuss the annual report, the revised Work Plan, and summarize accomplishments and management recommendations. This meeting represents an important forum for reviewing both the success of the IFPA to date and future work plans.

4. The Forestry Plan stipulates that future applications for either amendments of the Forestry Plan, or allowable annual cut (AAC) increment requests, will be made jointly by all holders of IFPAs in the Arrow Forest District.

5. The Forestry Plan stipulates a minimum of two years successful performance will be demonstrated before any application for an AAC increment will be made by IFPA holders. Before such as application is being considered, I recommend consultation with my staff to confirm the standards and current methodology of the Chief Forester, and to ensure the application demonstrates the spatial feasibility of locating the timber supply on the ground.

6. The Forestry Plan acknowledges the important role of the IFPA Technical Committee to review and oversee individual projects. I expect the Technical Committee will continue to organize these projects in a professional manner, and will seek peer review of technical projects as appropriate. I note "proof-of-concept" meetings involving agency experts and working plans, are proposed for the site index adjustment project, the cruise-based volume/age project, the GIS project, and the sustainability project prior to their implementation. These meetings will ensure the products of these projects can be applied to future AAC increment requests,

7. The Forestry Plan commits the IFPA holders to prepare a strategic silviculture plan for incorporation in the 1999 Resource Management Planning process, and to address future opportunities for field treatments in the TSA. I also note the IFPA holders will consider the Multi Year Agreement program in concert with the IFPA program, in terms of strategic application by the year 2000.

8. Finally, I note project working plans, reports, the Annual Work Plan, and the Annual Report will be posted on the IFPA website to facilitate public access.

Approval of the Arrow IFPA Forestry Plan is not to be construed as approval for an AAC increment based on the completion of the projects listed in the Plan. In order for these projects to contribute in any future AAC increment determination, they must provide a positive and demonstrated influence to the wood supply, and they must be conducted in a rigorous manner to the standards of the Chief Forester. While I expect some projects will demonstrate positive AAC influences, licensees should anticipate some projects may show negative influences.

I have been asked by FRBC regional staff to point out that the approval of the Forestry Plan does not obligate FRBC to fund any project in the Forestry Plan. Third party funding arrangements and conditions are not dictated by the Ministry of Forests.

Therefore, based upon my review and subsequent determination, the Arrow IFPA Forestry Plan is hereby approved for the period May 25, 1999 – 2004. This letter is an integral part of the IFPA Forestry Plan and should be attached to it.

If you have any questions about the contents of this letter, please contact John Pollack, Nelson Forest Region at (250)-354-6283.

Yours truly,

RRT

DRAFT
Appendix VII

FRBC Funding for IFPAs -- Eligibility Guidelines for 1999/2000

A. Introduction

Forest Renewal BC recognizes that eligibility criteria should not be allowed to become so restrictive that opportunities to be innovative would be lost and that preconceived rules could lead to this situation. However, Forest Renewal BC is answerable to its Board about whether or not due diligence has been exercised in the investment of funds. Because of this requirement, there remains a need to provide an acceptable degree of direction to investments in IFPAs.

The following eligibility criteria are designed to encourage proponents' creativity, yet be sufficiently structured to provide the Corporation with a sound basis for either accepting or rejecting proposed activities, i.e., these criteria are intended to achieve the right mix of direction and flexibility. Forest Renewal BC must be able to demonstrate the following:

- that investments occur as directed by the decisions of the Board; and
- that the activities proposed are technically sound.

IFPA holders will need to be able to demonstrate that the work they propose is consistent with the Forest Renewal BC strategic objective and the business area, and that it is feasible and technically sound. Criteria will be required to provide a basis for such a judgement. The application of these criteria must:

a) provide evidence that Forest Renewal BC is exercising due diligence;

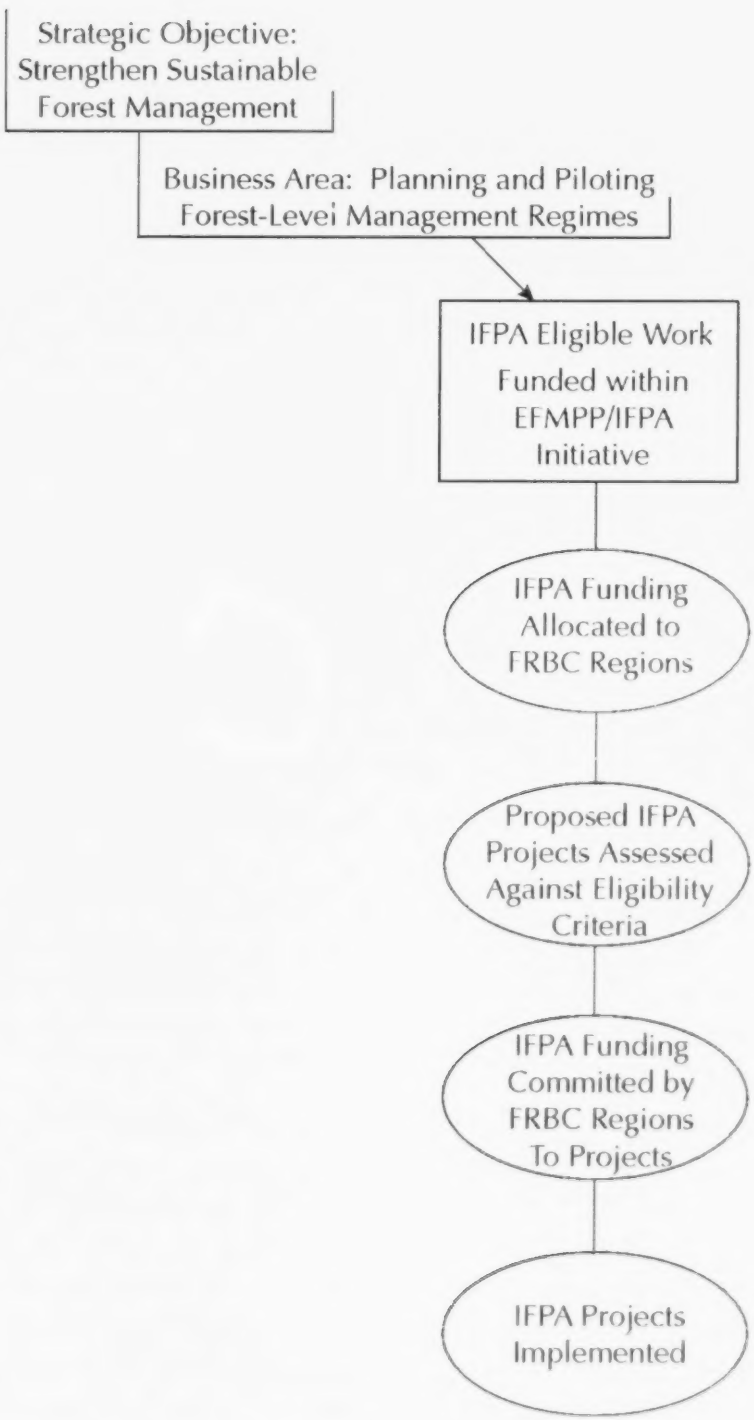
b) provide IFPA holders with enough flexibility to be able to include a wide range of projects which fit into the general direction that a) above must provide; and

c) set the direction which will influence the development of any long-term eligibility criteria required for 2000 and beyond.

The following approach to eligibility for 1999-00 has been developed with the above needs in mind.

Diagram 1 shows the general process for allocating FRBC investments in IFPAs.

Diagram 1: IFPA Funding Process



B. General Eligibility Criteria

1. **Allocated funds must be invested in work designed to meet both the strategic objective of strengthening sustainable forest management, and the business area purpose of providing new tools and information to support strategic level resource planning.**

   Eligible activities for IFPA funding under this strategic objective fall within one of the following categories:

   a) Forestry Plan Preparation
   b) Detailed Project Planning
   c) Research
   d) Monitoring and Evaluation
   e) Sharing Information

2. **Proposed projects within an IFPA may require a technical review by a recognized specialist in the area of work proposed, and a confirmation that the project design and the activities to be conducted are consistent with accepted technical standards.**

   IFPA holders must provide a rationale which demonstrates how the proposed work meets these needs. In general terms, eligible activities should focus on:

   a) explicit analyses of alternative management scenarios to select the best alternative;
   b) applied research and extension studies identified as important for adapting new technologies to the specific situation or for understanding and evaluating the outcomes;
   c) planning the implementation of management activities as an adaptive management experiment;
   d) monitoring and evaluating the outcomes; and
   e) ensuring the results are available to inform future decisions.

3. **Allocation of funds:**

   In 1999/2000, the available centrally held dollars have been allocated equally for use by each of the four IFPA agreement holders. Forest Renewal BC regions may commit up to this amount, plus any money the region has allocated independently, to eligible IFPA activities. If insufficient eligible projects are approved, Forest Renewal BC maintains the right to manage these funds to address other priorities of the corporation.

4. **Where operational activities are proposed as part of an IFPA project, funding should first be sought through Forest Renewal BC's land-based investment programs.** To the greatest extent possible, funds allocated to this business area should be used in support of innovative work.

   FRBC is also interested in matching funds or in-kind contributions that may be offered by IFPA holders in support of their IFPAs.

C. Specific Eligibility Guidelines

1.W here proposed work under an IFPA meets the general guidelines (described in B.1-4 above, the following specific activities may be funded. It should be noted that the following information relates to the process to be followed, not to the type of project to be considered. For 1999-2000, projects that successfully demonstrate conformity with the general guidelines above will be considered as eligible, provided that they address the procedural needs identified below.

Diagram 2 provides an overview of the eligibility requirements in the form of a checklist for project approval.

Forestry Plan Preparation:

Forestry Plans provide the base analyses required by the Ministry of Forests for IFPAs. FRBC provides one-time funding support for the preparation of the Forestry Plan required of new IFPA holders. Eligible activities are those associated with preparing a plan that adheres to Section 59.1(6)(e) of the *Forest Act*, the IFP Regulation and the Ministry of Forests IFPA Handbook. New inventory information considered important at this stage will not be funded through the EFMPP/IFPA initiative but may be available through FRBC's Resource Inventory Program — separate application is required. In 1999-00, $300,000 has been allocated for Forestry Plan preparation in new IFPAs.

Detailed Project Planning:

Following Forestry Plan preparation, detailed project planning by IFPA holders is required to compare and test a number of different innovative forestry management scenarios. Detailed project planning leads to approvals by FRBC for investments in IFPA-eligible activities.

FRBC will also provide funding support for detailed project planning as an adaptive management project, based on an approved work plan and the following general attributes:

a. involving stakeholders in determining management objectives, issues and options;

b. identifying key questions or uncertainties that have implications for management;

c. specifying the key learning objectives;

d. developing and implementing a plan to collect specific inventory information that is not already available and is identified as necessary for undertaking the analysis of management alternatives;

e. developing or adapting specific tools and methods for carrying out the analyses of alternative management scenarios;

f. comparing and testing a number of different innovative management scenarios for their cost effectiveness and their ability to meet management objectives and provide useful information;

Diagram 2: IFPA Work Approval Checklist

			YES	NO
1.	Proposed work is consistent with:			
	a) Strategic Objectives		☐	☐
	b) Business Area		☐	☐
2.	Proposed work falls within one or more of these approved categories:			
	a)	Forestry Plan	☐	☐
	b)	Detailed Project Planning	☐	☐
	c)	Research	☐	☐
	d)	Monitoring & Evaluation	☐	☐
	e)	Sharing Information	☐	☐
3.	Proposed work is consistent with eligible activities within one or more of the categories described above.		☐	☐
4.	Proposed work is consistent with accepted technical standards		☐	☐

g. developing quantifiable forecasts of outcomes for all options;

h. identifying specific research and extension work required to implement new technologies, or to evaluate the outcomes of a management regime;

i. designing management activities as an adaptive management "experiment," including a rationale for active versus passive approach, selecting indicators for all key values (short and long term), planning prescriptions and establishing a monitoring and evaluation plan.

Research:

Activities associated with carrying out the research and/or extension identified as necessary to support the management project, including:

a. field testing of innovative practices;

b. applied research studies and extension activities to develop or adapt new technologies to specific ecosystems; and

c. applied research studies necessary to understand and evaluate the outcomes of management regimes.

Monitoring and Evaluation:

Activities associated with analyzing how well the plan met objectives, how the outcomes differed from the predicted results and how management practices should be changed, including:

a. monitoring key response indicators (field data collection);

b. analyzing data to determine outcomes, comparing actual outcomes to forecasts and validating relationships predicted in the initial analysis of management alternatives;

c. interpreting and applying the results including updating models, adjusting actions and re-evaluating objectives.

Sharing the Information:

Activities associated with ensuring the results of the adaptive management project are readily accessible to other stakeholders in forest-level management planning in the province, including:

a. documenting actions;

b. providing extension activities to communicate results (e.g., workshops, field tours, brochures).